

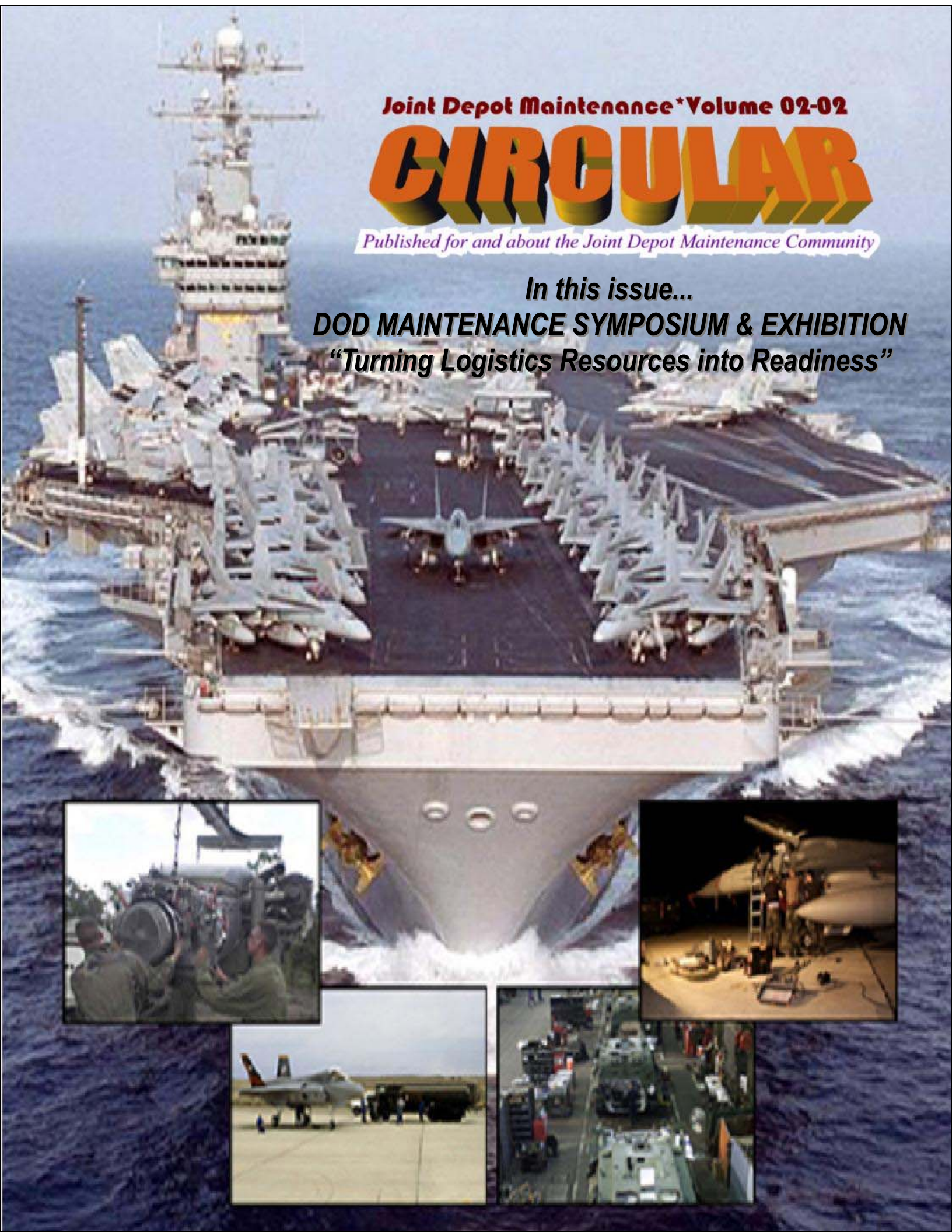
**Joint Depot Maintenance\*Volume 02-02**

# **CIRCULAR**

*Published for and about the Joint Depot Maintenance Community*

***In this issue...***

**DOD MAINTENANCE SYMPOSIUM & EXHIBITION  
“Turning Logistics Resources into Readiness”**





## ***From the director ... Symposium to high- light changes in store for DOD maintainers***



**M**y name is Col. Pamela D. Carter, and I am the new director of the Joint Depot Maintenance Activities Group. By the time you receive this issue of the *Joint Depot Maintenance Circular*, I will have been on the job nearly two and a half months. One of the biggest perks about being in the military is changing jobs every couple of years. You can experience much growth as you are exposed to different people and different missions, and your growth spurts can be put to good use when you are asked to be a change agent.

Logistics is a business of constant change, yet it remains the same in its foundational purpose ... total support to readiness and to the war fighter. Today's depot maintenance environment is representative of how logistics changes and how it remains the same. The environment is summed up in DOD's Future Logistics Enterprise (FLE).

The office of the deputy undersecretary of defense for Logistics and Materiel Readiness, Diane K. Morales, describes FLE as "an integrated set of six collaborative initiatives to achieve end-to-end customer service within Department of Defense logistics operations." Its primary intent is to "accelerate DOD's implementation of integrated logistics chains and commercial information systems to meet war fighter sustainment needs and the operational requirements of the National Defense Strategy."

The article on the next page contains excerpts from a document developed by Ms. Morales and the mem-

bers of the Joint Logistics Board that specifically addresses the FLE initiatives. Once you have had a chance to read it, you will see that maintenance, particularly depot maintenance, is prominently featured in the tenets of FLE. Maintenance turns logistics resources into readiness.

That thought leads me to extend a personal invitation to each of you to attend one of DOD's most significant annual events, the Maintenance Symposium and Exhibition, which will take place Oct. 28-Nov. 1, in Reno, Nev. With a theme of "Maintenance: Turning Logistics Resources into Readiness," the event is a must if you are in any way connected to the DOD maintenance arena.

Many of the maintenance issues we face today are planned highlights for discussion during the symposium and in this issue of the *Circular*. On pages 4 and 5, for example, you will find a complete rundown of the planned events. For an up-to-date view of the agenda covering all four days, visit [www.sae.org/dod](http://www.sae.org/dod) on the Web.

Reading this edition of the *Circular* is the next best thing to attending the symposium. Stay tuned to future issues for the latest news and updates on the technology available for continuous improvement in depot maintenance processes and capabilities.

A handwritten signature in black ink, appearing to read "P. D. Carter".

Pamela D. Carter, Col., USAF  
Director, Joint Depot Maintenance Activities Group

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*Cynthia Cox Underwood, editor*

# JDMAG welcomes new director



*Col. Pamela D. Carter*

**T**he Joint Depot Maintenance Activities Group (JDMAG) is pleased to welcome Air Force Colonel Pamela D. Carter as its new director. She replaces Navy Captain David Beck, who recently became the executive officer for Naval Air Depot, Jacksonville, Fla.

Col. Carter came to JDMAG from Hickam AFB, Hawaii, where she was the assistant director of Logistics, Headquarters Pacific Air Forces. The 24-year veteran has held a variety of positions in maintenance units.

She holds a Bachelor of Arts degree in psychology and philosophy from West Virginia State

College, a Master of Science degree in education from the University of Maryland, and a master's in National Security Policy Resourcing from the Industrial College of the Armed Forces, where she was a distinguished graduate. Her military education includes Squadron Officers School, Air Command and Staff College, Air War College, and the Industrial College of the Armed Forces.

Col. Carter is the recipient of the Defense Meritorious Service Medal, the Meritorious Service Medal with five oak leaf clusters, and the Joint Service Achievement medal with one oak leaf cluster.

## Joint Logistics Board initiatives enhance DOD customer service

**A**pproximately a year ago, deputy undersecretary of defense for Logistics and Materiel Readiness (DUSD(L&MR)) Diane K. Morales formed the Joint Logistics Board (JLB) to assess and shape Future Logistics Enterprise (FLE) initiatives for the Department of Defense (DOD). What follows are excerpts from a document that summarizes the efforts of the JLB to assess the policy implications of those initiatives and to chart a near-term way ahead for implementing them. The document, dated June 3, 2002, is titled *Future Logistics Enterprise, the Way Ahead*. It will be updated periodically.

The JLB is composed of DOD's most senior logisticians from the Services, Joint Staff, the U.S. Transportation Command, and the Defense Logistics Agency (DLA). The FLE is DOD's mid-term vision (2005-2010) to accelerate logistics improvement, enhance support to the war fighter, and align logistics processes and infrastructure with the operational demands of the 21<sup>st</sup> century.

The primary objective of the FLE is to ensure consistent, reliable support that meets war fighter requirements through enterprise integration and end-to-end customer service. It builds upon and accelerates specific, on-

**The Joint Technology Exchange Group will present a briefing on Future Logistics Enterprise at its next meeting. See page 6 for details.**

going Service/Agency initiatives to meet the requirements of the Quadrennial Defense Review (QDR) and the National Defense Strategy. The six initiatives are:

- ◆ Depot Maintenance Partnerships
- ◆ Condition-Based Maintenance Plus (CBM+)
- ◆ Total Life-Cycle Systems Management (TLCSM)
- ◆ End-to-End Distribution
- ◆ Executive Agents (EA)
- ◆ Enterprise Integration (EI)

With the end of the Cold War, the Department of Defense pursued numerous initiatives to align its logistics infrastructure and processes with the operational and business requirements of the 21<sup>st</sup> century. The Joint Chiefs of

*(Continued on page 8)*

### ***COMING UP ...***

# ***Annual symposium brings DOD maintenance to forefront***

**R**eno, Nev., will be the site of the Department of Defense (DOD) Maintenance Symposium and Exhibition, which promises a dynamic agenda, a record-setting exhibit area, and more than a thousand attendees. The symposium, which will take place Oct. 28-31 at the Hilton Hotel, has become the largest event of its kind that focuses solely on the maintenance of Defense weapon systems and equipment.

The Society of Automotive Engineers International (SAE), along with the Office of the Secretary of Defense, will produce the symposium. SAE has a powerful background in land, sea, and air systems and standards that affect everything from motor oil to aircraft aluminum. The organization also is experienced in producing large conferences such as this one.

Other keys to this successful event include outstanding support from the military Services and industry. Congress also plays an active role, with a steady stream of new laws and legal authorities to direct a functional area that has more than 700,000 civilian and military employees and consumes upwards of \$40 billion a year.

With a theme of "Maintenance – Turning Logistics Resources into Readiness," the symposium will showcase many of the initiatives under way in the rapidly changing maintenance arena, such as new weapon systems and management techniques. In addition, it will highlight the extraordinary support DOD maintainers are giving the operating forces in the aftermath of last Sept. 11.

Depot maintenance is a fundamental part of this dynamic environment, and its issues appear throughout this year's agenda. The opening panel on the first day will focus on maintenance readiness issues, and the depots will figure prominently in that discussion. Industry panels on the second day will focus on innovative sustainment ideas, including depot maintenance.

One breakout session will cover initiatives such as public-private partnering. Others will touch on workforce renewal, management information systems, and other initiatives specific to each of the military Services.

### ***JG-DM sponsors breakout session***

The Joint Group on Depot Maintenance (JG-DM), a subgroup of the Joint Logistics Commanders, historically has sponsored a breakout session at the annual maintenance symposium. This year is no exception. The JG-DM will host a session entitled "Readiness--The Depot Contribution," during which Major Donald Humpert will review how implementing the Theory of Constraints at the Marine Corps' depots is increasing the turnaround time for customer support. Mr. Dan Willems of Ogden Air Logistics Center, Hill AFB, Utah, will detail operational improvements provided to the F-16 weapon system in response to Operation Enduring Freedom. And, Captain Stuart L. Paul of the Naval Air Systems Command will address the organizational emphasis on process improvements to support the war fighter in current operations with his presentation of "Our 3 NADEPs (naval air depots) -- 10,800 People Fixing For The Fight."

Finally, as a special presentation, Mr. Herman Raiff of HQ Air Force Materiel Command will illustrate the command's partnering process, philosophy, expected benefits, and the role of partnering within the Air Force's long-term depot maintenance strategy.

### ***Best maintainers vie for Phoenix award***

Highlighting the symposium is the presentation of the Secretary of Defense Maintenance Awards to outstanding military maintenance units and the designation of the Phoenix Award winner as the single best unit for the year. These awards are presented annually to large, medium, and small units in recognition of the contribution maintenance makes to keeping the military forces ready and sustaining them during conflict. The speaker for this year's awards banquet is the commander of the Air Force Special Operations Command. (See pages 12-13 for more information on the DOD maintenance awards.)

## *Exhibits and more provide something for all*

Throughout the symposium JDMAG and many other organizations will provide displays and exhibits that highlight depot maintenance roles, capabilities, and processes.

The final discussion panel on the last day features the senior Service logisticians responding to questions from the audience, and depot maintenance always figures prominently in those discussions.

Each year, the symposium's location presents unique opportunities for tours and activities, and this year is no exception.

- ◆ Monday afternoon includes a set of discussion seminars that should appeal to many. Later that afternoon, the "great ideas" competition will feature short presentations on some of the best innovations in maintenance today.
- ◆ Tuesday evening features a reception in Harrah's National Automobile Museum, arguably the finest collection of classic automobiles in existence.
- ◆ On Wednesday afternoon, the exhibit hall and a special static display of aircraft at the Reno Air National Guard will provide "interactive" displays.
- ◆ The Fallon Naval Air Station will host an optional tour Thursday afternoon of the Naval Strike and Air Warfare Center, the home of "Top Gun."

More activities include spouse tours, guest activities, a guest lounge, a special reception for exhibitors, and an event-packed Thursday morning featuring a seated breakfast, senior level speakers, and the many entertainment attractions available in the hotel and Reno at large.

This is also the place to see some amazing static displays. The Army will display a mobile parts hospital that can build a part from thin air. A Predator drone, the one that has figured so prominently in Afghanistan, also is slated to be on display. In addition, several advanced weapon systems will be available for close inspection.

Underneath all the formal activity, the symposium is the perfect place to trade ideas and initiatives, to learn what is going on in the maintenance world, and to make contacts for business and potential partnerships. The exhibit hall is the largest ever this year and will almost certainly continue to grow in the years ahead. Recommended attendees include

- ◆ senior defense logistics and resource managers;
- ◆ military and civilian maintenance managers from entry level to executives and international counterparts;

## **Marine Corps Maintenance Centers Turn Logistics Capability into Readiness**

**by Major Donald E. Humpert**

**T**he Marine Corps has long regarded its two multi-commodity maintenance centers in Barstow, Calif., and Albany, Ga., as strategic logistics assets. Today, the centers are proving their value more than ever.

They have found that aging systems that have been through one of the depots for a rebuild or enhanced "Inspect and Repair Only As Necessary," have a more than ten percent higher average readiness rate than their counterparts that have not. They have also found that the average time per repair is less than half for these units than for those that have not yet been to a depot. The challenge is how to get more of these systems through a maintenance center without increasing operating expenses. The Marine Corps is successfully meeting that challenge.

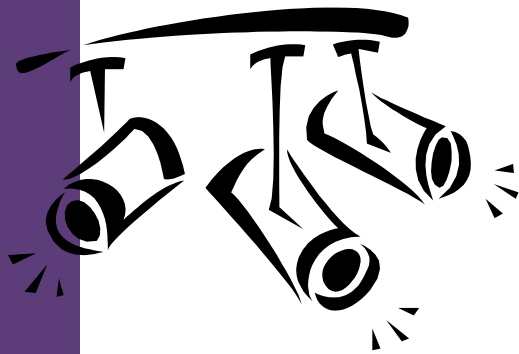
The maintenance centers have developed a unique Marine Corps production system in combining "best-of-breed" practices. The pilot effort was on the power unit for their Logistics Vehicle System where they cut repair-cycle time by two thirds and direct labor hours by almost half. The Theory of Constraints production management and project management techniques provide the overarching framework; a manufacturing resource planning system provides the "engine"; and a lean thinking philosophy decreases waste and organizes and cleans the workspace. In addition to the benefits of increased depot throughput, the morale of the "civilian marines" working in the depots is better than ever.

Marine Corps customers have high expectations. Marine Corps maintenance centers are now meeting and exceeding these expectations. A "can do" spirit of innovation has taken hold—promising that the best is yet to come.

- ◆ production, process, and information systems specialists;
- ◆ researchers and product development representatives;
- ◆ commercial product support providers and original equipment manufacturers; and
- ◆ anyone who can contribute to successful DOD maintenance operations.

For information visit the SAE Web site at [www.sae.org/dod](http://www.sae.org/dod).





### ***SPOTLIGHT ON...***

# **The Joint Depot Maintenance Activities Group**

## ***Who We Are and What We Do***

*By Tom Gorman, Strategic Planner*

**T**he Joint Depot Maintenance Activities Group (JDMAG), located at Wright-Patterson Air Force Base Ohio, provides staff support to the flag-level Joint Group on Depot Maintenance (JG-DM). The JG-DM provides corporate leadership for the Defense Department's (DOD) depot maintenance

function, with the intent of making the best use of organic and commercial industrial depot maintenance capabilities.

Completely "purple" in its organization, JDMAG consists of 23 civil service employees -- seven Navy, seven Air Force, eight Army, and one Marine Corps -- and a military 06 director that rotates biennially between the Navy and the Air Force. Tasks are assigned to JDMAG employees regardless of Service affiliation and regardless of the Services that might be affected by the tasks.

Daily, JDMAG supports the JG-DM through its administration of the Joint Depot Maintenance (JDM) Program. Specific ongoing missions include:

◆ **Recommending depot source of repair (DSOR) assignments:**

◇ Conducting depot maintenance interservice studies and keeping a repository of joint DSOR decisions.

◇ Coordinating the updating and publication of the JDM Program regulation (OPNAVINST 4790.14A, AMC-R 750-10, AFI 21-133(I), MCO 4790-10.B, DLAD 44151.16).

◇ Conducting Depot Maintenance Interservice Support Agreement (DMISA) training.

◆ **Coordinating joint business planning:**

◇ Publishing the *Joint Depot Maintenance Business Profile*, an annual compendium of Service budget, workload, capacity, and personnel data.

◇ Conducting joint reviews of proposed depot maintenance military construction (MILCON) projects.

◇ Providing liaison to the Joint Group on Materiel Management's Interservice Supply Support to Depot Maintenance Work Group, which addresses many long-

### ***JTEG to address best business practices***

**T**he next Joint Technology Exchange Group (JTEG) meeting is scheduled for Nov. 5-7 at the Fairfield Inn & Suites, 3031 Olentangy River Road, Columbus, Ohio 43202. The theme will be "best business practices." Anyone who is associated with Department of Defense (DOD) depot maintenance is welcome to attend.

The JTEG was chartered by the Joint Group on Depot Maintenance in 1984 to facilitate the introduction of new technology into DOD depot maintenance activities, while avoiding unnecessary duplication. The group consists of principal representatives from the logistics headquarters of each of the military Services, the Coast Guard, the Defense Logistics Agency, and members of the JDMAG staff.

For meeting information visit the JDMAG Web site at [www.jdmag.wpafb.af.mil](http://www.jdmag.wpafb.af.mil) or contact Steve Siens, (937) 656-2774/DSN 986-2774, [steve.siens@wpafb.af.mil](mailto:steve.siens@wpafb.af.mil) or Carl Adams, (937) 656-2771/DSN 986-2771, [carl.adams@wpafb.af.mil](mailto:carl.adams@wpafb.af.mil). For reservations contact the Fairfield Inn at (614) 267-1111 or FAX (614) 267-0904.

standing problems with supply support to depots supporting interservice customers.

- ◇ Conducting training on depot maintenance capacity and utilization measurement.

- ◇ Compiling and publishing the semi-annual *Depot Maintenance Operations Indicators (DMOI) Report*, which provides performance data for DOD depot maintenance activities.

- ◇ Conducting the biennial DMISA customer satisfaction survey.

- ◇ Consulting on depot maintenance public-private partnerships.

- ◇ Serving on OSD's Depot Maintenance Core Implementation Working Group.

- ◇ Maintaining the *Defense Depot Maintenance Council Cost Comparability Handbook (CCHB)* and conducting CCHB training.

- ◇ Managing the JG-DM-sponsored depot maintenance track at the annual OSD Maintenance Symposium.

- ◇ Administering a depot maintenance research program that involves matching students with depot maintenance topics and keeping a repository of the research.

- ◆ **Exchanging depot maintenance technology information:**

- ◇ Administering the Joint Technology Exchange Group (JTEG), which focuses on the latest innovations in depot maintenance process technologies.

- ◇ Maintaining a comprehensive Web site of technology projects, briefings, reports, and articles.

- ◇ Publishing the biennial *Depot Profiles*, which includes a comprehensive listing of each depot's technological capabilities.

JDMAG's most significant recent accomplishment is its role on the joint team that developed the Joint Strike Fighter (JSF) Depot Maintenance Core Capability Requirements Determination and Workload Quantification Procedure. JDMAG provides representatives to the JSF Joint Depot Maintenance Strategy Team (JDMST), which also includes representatives from the JSF Program Office (JPO), Naval Air Systems Command (NAVAIR), Air Force Materiel Command (AFMC), the air system contractor, and OSD. The JDMST, which is developing a strategy for implementing public private-partnering for JSF workloads, helps the JPO address Title 10 depot maintenance issues. The core procedure developed by this team is a single NAVAIR-AFMC approach for determining JSF core capability requirements.

This unique organization exists to promote interservice cooperation in DOD depot maintenance management and to promote global, DOD-level optimization. Accomplishing this can often be difficult but, JDMAG's 20-year existence, and the Services' willingness to cooperate through the forum that JDMAG provides, is proof of the Services' commitment to do what's best for the war fighter and the taxpayer. Φ

## The Air Force – Turning Logistics Resources into Readiness

**A**s the national military strategy has evolved to meet new threats and embrace new operational concepts, the role of the Air Force has changed to meet these challenges. The Air Force is transforming itself into an expeditionary force, able to provide a full spectrum of air and space capabilities that can reach anywhere in the world at any time. The Air Force's ability to meet the challenges of today and tomorrow is based on mastery of six core competencies: Aerospace Superiority, Information Superiority, Global Attack, Precision Engagement, Rapid Global Mobility, and Agile Combat Support.

The key to turning logistics resources into readiness is through agile combat support – the ability to provide reliable, flexible, and timely support services and products to the operational forces worldwide. Agile combat support supports the full spectrum of military operations and steady-state peacetime operations. Light, lean, and lethal, agile combat support provides the capability to

meet a 72-hour response for food or bombs on target and flexible efficient sustainment of deployed forces. Critical future logistics capabilities for agile combat support include:

- ◆ Building an aerospace force that enables robust, distributed military operations with time-definite sustainment.
- ◆ Continuing to upgrade the support we provide our light, lean, lethal combat forces as they deploy around the world.

Given the importance of logistics to the national defense, the Air Force has formulated its vision to provide Agile Combat Support to the war fighter – ensure Air Force weapon systems and equipment are safe and ready to operate across the whole spectrum of operations, from training to major theater wars, by providing focused support to the war fighter.

# MAINTENANCE: TURNING LOGISTICS

(Continued from page 3)

Staff (JCS), in Joint Vision 2020 (JV 2020), described a military environment based upon speed, precision, lethality, and information dominance. Further, they identified “focused logistics” as necessary to project and sustain forces in that future environment.

## *Depot Maintenance Partnerships*

Depot maintenance services, costing over \$17B annually, are performed at a mix of 20 public and hundreds of private facilities. While both public and private providers have improved performance, the challenges to organic depots are significant. These facilities currently have an aging workforce comprised of those workers who remained after a 51-percent reduction in force over the last ten years, and severely degraded facilities and equipment, because funds were re-allocated to higher priority requirements.

## **Future Logistics Enterprise: a way ahead for DOD**

The primary intent of the depot maintenance partnership initiative is to enhance depot support to the war fighter by enabling and empowering the DOD organic depots to develop appropriate partnerships with the commercial sector, while recognizing the legitimate national security need for DOD to retain depot maintenance capability. The desired end state is a dramatic increase in depot maintenance public-private partnerships, resulting in greater private sector investment in facilities and equipment, better facility utilization, reduced cost of ownership, workforce integration, more efficient business processes, greater credibility, and a more collegial working relationship with Congress.

Several actions were completed in support of this initiative. Two provisions beneficial for depot maintenance partnering were included in the National Defense Authorization Act for Fiscal Year 2002. These provisions exempt partnering work from the 50-percent limit on contracting when accomplished by the private sector at designated depots and amend several “hold harmless” provisions to include cost, schedule, and quality as a basis to file a claim if the public sector fails to comply with a contract. A comprehensive policy memorandum was promulgated providing a framework to aggressively expand partnering. A communications strategy for stakeholders has been developed to increase support and understanding for this initiative.

## *Condition-Based Maintenance Plus (CBM+)*

Today, the DOD does not adequately predict failures on equipment to produce broad-based planned maintenance programs. The inability to adequately predict failures has produced a labor force that requires extensive knowledge and training; diagnostic equipment that is cumbersome, time consuming, and often unreliable; and long repair-cycle times, which result in expensive supply pipelines. Many of the current business processes rely on time or operation intervals for servicing that are labor intensive and fail to address specific conditions driven by environmental and operational factors. Additionally, there is a need to better integrate maintenance and other logistics functions to improve responsiveness and reduce footprints. Moving toward CBM+, with more accurate predictions of impending failures based on condition data, would result in dramatic savings and improved weapon system availability to meet combatant commander requirements.

CBM+ focuses on inserting into both new and legacy weapon systems technology to support improved maintenance capabilities and businesses processes. It also involves integrating and changing business processes to dramatically improve logistics system responsiveness. Under consideration are capabilities such as enhanced prognosis/diagnosis techniques, failure trend analysis, electronic portable or point-of-maintenance aids, serial item management, automatic identification technology, and data-driven interactive maintenance training. The ultimate intent of this initiative is to increase operational availability and readiness throughout the weapon system life cycle at a reduced cost. The desired end state is a force of maintainers who have the knowledge-skill sets and tools to maintain complex systems at the optimal time through the use of available technologies that improve maintenance decisions and integrate the logistics processes.

## *Total Life-Cycle System Management*

Sustainment of DOD systems consumes approximately 80 percent of DOD logistics resources or \$62B annually. End-to-end customer support for system sustainment involves the integration of logistics chains across government and industry throughout the life cycle of a system. Specific DOD challenges in this area include:

- ◆ Sporadic attention to sustainment characteristics during the early requirements process;
- ◆ Distinct break in systems responsibility between the acquisition and sustainment phases of the life cycle;



- ◆ Sustainment processes focused on functional optimization versus customer service.

To address these challenges, the Services and DLA tested innovative sustainment strategies on pilot programs. DOD directed application of promising strategies and established the program managers as responsible for the total life cycle (acquisition and sustainment) for new systems. Subsequently, the QDR directed application of life-cycle management and performance-based logistics (PBL) for new and fielded major systems.

The primary intent of Total Life-Cycle System Management is to improve weapon system sustainment by establishing clear responsibility and accountability for meeting specified war fighter performance requirements within the program management office. Project managers (PM) will be held responsible for the overall management of the weapon system life cycle to include: timely acquisition of weapon systems, meeting war fighter performance requirements, integration of sustainability and maintainability during the acquisition process, and weapon system sustainment to meet or exceed war fighter performance requirements throughout the life cycle at best corporate value to the Services and DOD.

## *End-to-End Distribution*

Currently, the DOD distribution environment is comprised of multiple, unsynchronized distribution nodes and segments, with rescheduling often required at each change of transportation mode. DOD employs myriad discrete supply chains that are optimized at the item/commodity/customer/mode level but not harmonized at the enterprise level. This

distribution environment places a heavy materiel-tracking burden on the customer, who lacks complete information and end-to-end visibility. This often creates unnecessary customer workloads at the point of receipt, which is especially critical when the point of receipt is an austere area of conflict. Instead of focusing on the customer's time-definite delivery requirement from end to end, the focus of distribution providers is optimization by node, by supply chain segment, or by color of money.

Although the time an item spends in any given supply chain segment may be minimal, the end-to-end movement from source to ultimate customer is often excessive. (On the other hand, speed alone is not the desired outcome; rather, the goal is to meet a customer's expectation regarding delivery time.)

Additionally, contracts for materiel acquired through purchase card, direct vendor delivery, and weapon system contractor logistics support do not always provide for wartime, peacetime, or shipment to contingency theaters (especially austere locations), resulting in delays due to frustrated cargo. Moreover, the sustainment and materiel distribution process is not well integrated with force deployment flow, and deploying forces and sustainment compete for the same lift capacity and supporting infrastructure, lift availability and port capability are at times adversely impacted during deployments.

The end-to-end distribution initiative is directed toward streamlining war fighter support by providing materiel, including retrograde and associated information, from the source of supply or point of origin to the point of use or disposal, as defined by combatant commanders, military Service, or characteristics of the commodity, on a worldwide basis. The intent of the initiative is to influence

## The Navy – Turning Logistics Resources into Readiness

One of the processes the Navy is employing to “turn logistics resources into readiness” is the Focused Logistics War game (FLOW). FLOW is a series of joint biennial seminar style games that uses a scripted scenario to examine logistics challenges. Unlike most standard war games and exercises, FLOW focuses exclusively on surfacing and resolving issues associated with supplying and sustaining operations. It provides a joint forum in which specific Naval issues can be examined.

The issues include the timing and force flow of combat engineering assets into the theater of operations; availability and access to engineering intelligence; executive agent responsibilities for commodities such as food, bulk fuel, medical supplies, and construction/barrier materiel; and strategic lift and port throughput capability shortfalls. The FLOW assessment process directly supports the mission of the Navy's director of Fleet Readiness and Lo-

gistics (N4): meet the needs of the war fighter with a cohesive overarching strategy that

- ◆ plans and sets fleet readiness and logistics requirements;
- ◆ aligns resources within sponsored programs;
- ◆ ensures the continuous design, development, and integration of Naval logistics functions to ensure fleet readiness;
- ◆ develops and coordinates Navy logistics policy; and
- ◆ ensures compliance with policy and effective utilization of resources to meet requirements.

Using this tool, N4 can directly link supply and sustainment resources to the Navy's combat assignments. Logistics competencies will be tailored to specific situations and objectives, and ensure the highest level of maritime logistics capabilities will be there to support the fleet.

# *MAINTENANCE: TURNING LOGISTICS*

acquisition, sourcing, and positioning to facilitate the flow of materiel to the end user, ensuring that deployment and sustainment are synchronized. The desired end state is an integrated, synchronized, end-to-end distribution system to meet war fighter requirements for information and materiel.

## *Executive Agents*

According to the most recent focused logistics war game, assignment of logistics Executive Agent responsibilities was the primary concern. Specifically, at the operational, theater, or tactical level, directives, local interservice support agreements, and DOD/joint publications assign Service components as “lead” or “provider” of common services or materiel support to other Service component elements during joint force operations. Changes in logistics business processes incorporating supply chain management techniques used by strategic or wholesale level providers add further complexity. Examples of these are subsistence (Class I Supply) and bulk fuel (Class III Supply). This issue has a key defining impact on how a combatant commander or joint force commander receives logistics support. Lack of clearly defined, coordinated, and consistent application of these terms during peacetime, combined with the variety of ways joint force commanders assign common support missions to components, results in confusion and complicates a combatant commander’s planning processes. It presents significant challenges to the military Services as they plan for and resource these assigned functions, particularly in small-scale contingencies.

In turn, mission responsiveness and agility in meeting operational requirements and readiness is degraded. In recent years, there have been significant force structure changes, impacting execution of Lead Agent responsibilities. Executive Agent responsibilities drive both Active and Reserve Component force structure. There is no clear process to define requirements for the Executive Agent, Lead Agent, Lead Service, or Provider. Without clear and quantified requirements, the assigned EA cannot adequately plan to provide the needed support. To assure responsiveness and agility, there is a need to integrate new support capabilities (i.e., supply chains) and their associated managers.

The EA initiative is aimed at improving support to war fighters by ensuring that EA roles, responsibilities, resources, and capabilities are responsive to the supported combatant commander’s deployment and sustainment requirements. The initiative builds upon the emerging results of the recent focused logistics war games, analyses of EA responsiveness, and applications of customer relations management.


The primary intent of the EA initiative is to assess and align EA designations with war fighter requirements arising from the National Defense Strategy. The desired result of this initiative is a formal assignment process fo-

cusing logistics EA responsibilities on support of war fighting requirements; EA assignments that support the war fighter across the full spectrum of operations, including support on an end-to-end basis and rapid response to all deployments; improved crisis/deliberate planning to include EA responsibility and alignment of the resource (budget, force structure, etc.) responsibilities associated with the EA.

## *Enterprise Integration*

Presently, interactions among DOD customers and partners are characterized by paper-based and batch-processed transactions, created and recreated in a sequential chain of activity – functional stovepipes. These processes and transactions do not capitalize on today’s technology and best practices. Over the years, lack of oversight and real portfolio management produced thousands of logistics systems and associated interfaces, which must be sustained and maintained. It’s estimated that between \$1.5B and \$2.5B is spent annually to support these logistics systems that remain susceptible to errors and delays that do not support today’s more agile, lethal defense forces.

To accelerate development of a logistics EI, this initiative builds upon efforts, under way within the Services and DLA, which successfully use commercial Enterprise Resource Planning (ERP) and other commercial off-the-shelf (COTS) tools for modern, integrated solutions to complex information requirements across the DOD logistics enterprise. Since changes to commercial software increase cost and risk, the initiative seeks to minimize software change by identifying common, reusable business practices assumed by available software that will support participants across the enterprise. The initiative is based upon phased implementation with adequate training and the full support of leadership. Collaborative solutions and shared knowledge will be encouraged through policy initiatives and oversight. The desired end state of this initiative is for highly trained and skilled people within the DOD logistics enterprise to have access to near-real-time, actionable information provided by modern, commercially based software products that have been rapidly implemented to enable reengineered logistics processes and business rules.

An ongoing action to support implementation of this initiative is continued coordination with the USD Comptroller staff to outline relationships between acquisition/logistics and financial future-oriented initiatives. Additionally, fact-finding reviews of “Enterprise Initiatives” (phase one) are complete and a management mechanism, the “Triangle,” was established for oversight and collaboration to support realization of the EI architecture. The three elements of the “Triangle” are program implementation, change management, and best business practices. 

# Joint Logistics Commanders hold talks

By Cpl. Nicholas Tremblay, Marine Corps Logistics Base, Albany, Ga.

**T**wice a year commanders from all branches of the U.S. armed forces materiel management centers and commands, the Navy's Fleet Readiness and Logistics Division, the director of the Defense Logistics Agency, and invited participants, such as the deputy undersecretary for Logistics and Materiel Readiness and the deputy commandant for Installations and Logistics meet to discuss logistic issues as they pertain to U.S. military peace and war-time operations.

Brig. Gen. Bradley M. Lott, commander, Marine Corps Materiel Command, hosted the Joint Logistics Commanders (JLC) meeting Aug. 15 at Marine Corps Logistics Base, Albany, Ga. The previous JLC meeting was hosted by the Air Force at Kennedy Space Center in Florida.

"The purpose of these meetings is to bring senior level military logisticians together in reaching understandings of broad individual or group logistics challenges and to establish resolutions to these challenges, which are beneficial to all," said Gary Leitner, the Marine Corps JLC Secretariat member. "These gatherings are critical to military logistical operations in terms of supporting the initiatives of functionally oriented subgroups, which meet individually many times throughout the year."

The official purpose of the JLC, self-chartered with Department of Defense (DOD) level support in 1966, is to improve military effectiveness

- ◆ first by promoting the development and maintenance of technical standards needed to ensure interoperability of combat units;
- ◆ second by promoting the development and maintenance of business standards needed to ensure efficient support between the Services, DOD, and industry; and
- ◆ third by seeking out opportunities to eliminate overlap and duplication.

The JLC charts subgroups to conduct studies, to recommend solutions, and to implement these solutions to major and/or broad logistics challenges that impact all Services.

A general officer or a member of the senior executive service normally chairs these subgroups with representatives from all the Services, the Defense Logistics Agency (DLA), and the National Aeronautics & Space Administration, when issues pertain to pollution preven-



*Air Force Lt. Gen. Charles H. Coolidge (left), vice commander, Headquarters Air Force Materiel Command; Army Gen. Paul J. Kern, commanding general, U.S. Army Materiel Command; and Brig. Gen. Bradley M. Lott, commander, Marine Corps Materiel Command, listen to proposed solutions to various issues that affect the U.S. military during the recent Joint Logistics Commanders' Conference. (U.S. Marine Corps photo by Cpl. Nicholas Tremblay)*

tion. These groups are currently formed based on functional responsibility that includes aviation, calibration and measurement technology, depot maintenance, government and industry data exchange, materiel management, ordnance, and pollution prevention.

"What makes the JLC such a success is the different perspectives and possible resolutions that each branch of the Service, DLA, and others bring to the table," said Leitner. "Issues discussed at these meetings have a direct impact on all Services' logistics operations with some, such as depot maintenance and pollution prevention, being more germane to Albany operations."

"Specific issues include aging aircraft, lead solder alternatives, depot level funding carryover, ammunition's industrial base, focused logistics war games, Army logistics transformation, and the interchange of data between the government and industry. All of these current issues effect every Service and DLA," he said.

The importance of these issues is evident due to the resources expended and the level of officials who participate and who support the outcomes of these meetings. Each branch of the Service, DOD, and DLA makes the JLC a success.

DLA will host the next meeting in February at its headquarters in Alexandria, Va.  $\Phi$



# ***MAINTENANCE: TURNING LOGISTICS***

## ***Leaning into the job @ Red River Army Depot***

**G**eneral Paul J. Kern, commander of the U. S. Army Materiel Command (AMC), has recently published a policy letter outlining his intent to implement Lean Thinking throughout AMC. As a result, one of AMC's major subordinate commands, the U.S. Army Tank-automotive and Armaments Command (TACOM), has plans to immediately and aggressively implement Lean Thinking at its manufacturing arsenals and maintenance, repair, and overhaul depots. One of TACOM's depots, Red River Army Depot (RRAD), located in the northeast corner of Texas in Texarkana, has taken the lead as TACOM's pilot organization for Lean implementation.

RRAD is an ISO 9002-registered industrial complex providing responsive and innovative solutions for the Department of Defense (DOD) in repair, overhaul, recapitalization, and conversion of combat and tactical vehicles. Red River also has the only capability



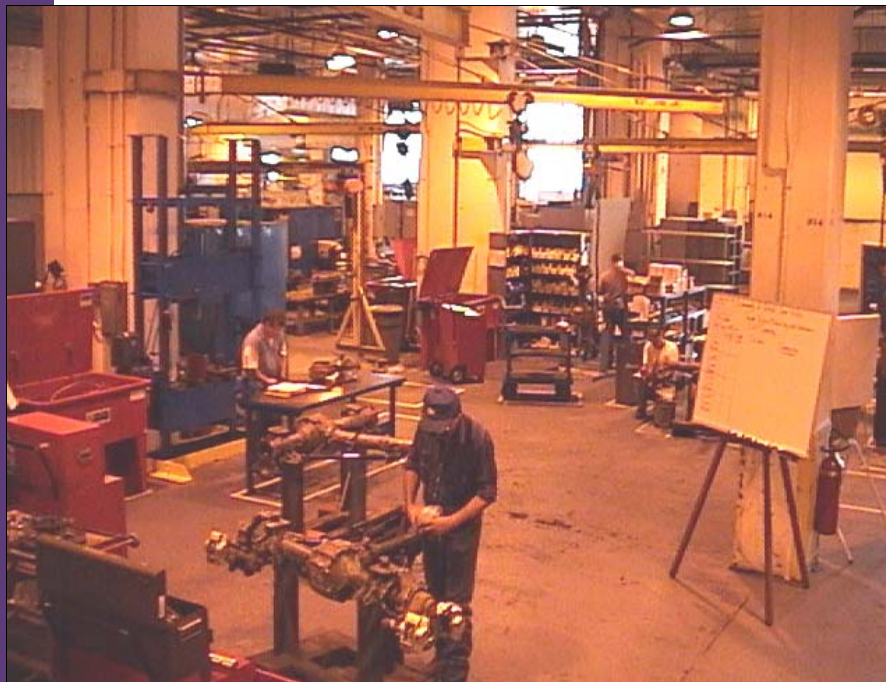
**Production Line Before Lean and ...**

within DOD to remanufacture road wheels and tracks and to recertify Patriot and HAWK missiles. Recognized as the Center of Industrial and Technical Excellence (CITE) for

Bradley Fighting Vehicle Systems, Multiple Launch Rocket System carriers, rubber products, and Patriot missile recertification, the depot's technical resources include the ability to design, fabricate, and manufacture a wide range of items from specialty parts to unique prototype weapon systems and vehicles.

RRAD commander Colonel Fred Hart led a visit to Warner Robins Air Force Base, Ga., last February to review its implementation of Lean. Red River's senior leaders returned convinced that Lean Manufacturing would greatly benefit the depot.

As part of the depot's commitment to excellence, quality, and continuous improvement, RRAD began overhauling the production lines and changing the way it did business. The depot's strategy included ISO 9002 registration in conjunction with implementing Lean Manufacturing, which is a process that seeks to minimize waste - unnecessary



**Production Line After Lean**



# ***RESOURCES INTO READINESS***

time, materials, and effort - in the production process. The depot brought in Simpler Consulting, Inc., to help make this transition more efficient and effective.

Some of the advantages of going Lean are: gaining a competitive edge, increasing production, increasing the frequency of on-time delivery, increasing quality, and responding quicker to customers' needs.

The leadership at RRAD began the implementation process by sending part of its workforce to training on Lean Manufacturing principles and then establishing a "train the trainer" program. Additionally, the commander, Colonel Fred Hart, held meetings with the workforce to educate them on the concept of Lean Manufacturing, how the depot was planning to implement Lean, and how implementation would affect the workforce and the depot. Then, the workforce from Small Emplacement Excavator (SEE) axle repair set up a pilot program on their repair line.

After the pilot program was initiated on the SEE axle line, implementation of Lean on the rest of the SEE production lines followed. During this phase, supervisors



## **Production Line Before Lean and ...**

and workers from all SEE production lines joined together to visually map all the phases of production that a SEE vehicle goes through during rebuild. This helps to identify elements of waste such as duplication of effort and excess materials, travel distance, and time.

Since implementing Lean in March 2002, RRAD has focused on the Heavy Expanded Mobility Tactical Truck (HEMTT) engine and the SEE recapitalization program. Once the SEE axle line and the HEMTT engine lines were modified to incorporate Lean principles, the depot began using metrics to measure improvements.

RRAD's long range plan includes application of Lean principles to a High Mobility Multipurpose Wheeled Vehicle pilot recap program, a fabrication program for kingpin kits, track and road wheel repair operations, and Bradley and Multiple Launch Rocket System secondary repair programs. Φ



## **Production Line After Lean**

## MAINTENANCE: TURNING LOGISTICS

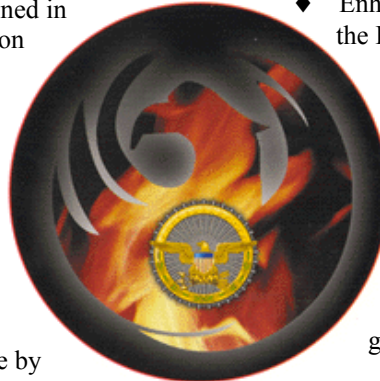
### TOP MAINTAINERS COMPETE FOR COVETED AWARDS



**E**ach year, the Secretary of Defense Maintenance Awards Program recognizes outstanding achievements in military equipment and weapon system maintenance by intermediate and organizational level maintenance organizations of the military Services. Awards are presented in the categories of small, medium, and large units as defined in DOD Instruction 1348.30. (See winners on next page.)

In addition, the prestigious Phoenix Award is presented to the best of each year's winners. The purpose of this awards program is to:

- ◆ Improve materiel readiness throughout the DOD by providing a positive incentive for extraordinary maintenance efforts.
- ◆ Improve efficiency and reduce waste by encouraging innovative management and use of resources.



- ◆ Recognize below depot-level maintenance programs and unit level operations.
- ◆ Aid development of competitive programs within DOD components by providing a higher level of competition with commensurate recognition.
- ◆ Enhance maintenance awareness throughout the Department of Defense.

Maintenance includes the actions taken to retain military equipment and weapon systems in a high state of readiness or to restore them to serviceability. Inspection, testing, servicing, repair, rebuilding, and modification are all elements of maintenance. Depot level maintenance recognized by other programs is not included in this awards program. Φ

***As the legendary phoenix gives itself new life, so too does maintenance give continued life to military equipment and weapon systems***





**DEPUTY UNDER SECRETARY OF DEFENSE FOR  
LOGISTICS AND MATERIEL READINESS  
3500 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3500**

**August 2, 2002**

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS  
CHIEF OF STAFF, UNITED STATES ARMY  
CHIEF OF NAVAL OPERATIONS, UNITED STATES NAVY  
CHIEF OF STAFF, UNITED STATES AIR FORCE  
COMMANDANT OF THE MARINE CORPS

SUBJECT: 2002 Secretary of Defense Maintenance Award Winners

Annually, the Secretary of Defense Maintenance Awards recognize the Department of Defense's outstanding field level military maintenance units. I am pleased to advise you of the 2002 Secretary of Defense Maintenance Award winners.

**SMALL CATEGORY**

A Company, 201<sup>st</sup> Forward Support Battalion, Vilseck, Germany United States Army  
510<sup>th</sup> Fighter Squadron Aviano, Italy United States Air Force

**MEDIUM CATEGORY**

9<sup>th</sup> Engineering Support Battalion Camp Hansen, Okinawa, Japan United States Marine Corps  
18<sup>\*</sup> Maintenance Squadron Kadena Air Base, Okinawa, Japan United States Air Force

**LARGE CATEGORY**

USS ENTERPRISE (CVN-65) Norfolk, VA United States Navy  
354<sup>th</sup> Fighter Wing Eielson Air Force Base, Alaska United States Air Force

The Secretary of Defense Maintenance Awards Ceremony and Banquet is scheduled for Wednesday, October 30, 2002 at the Reno Hilton, Reno, Nevada as part of the 2002 DoD Maintenance Symposium. The highlight of the ceremony will be the presentation of the Secretary of Defense's Phoenix Trophy. The recipient of the Phoenix Award is selected from the six Maintenance Award winners and is recognized as the "Best of the Best" maintenance unit within DoD. The Phoenix trophy is DoD's highest award for field level maintenance excellence.

Please extend the sincerest congratulations of the Secretary of Defense to each of your Maintenance Award winners.

For further information, my point of contact is Mr. Chuck Field, (703) 697-9067, [chuck.field@osd.mil](mailto:chuck.field@osd.mil). OADUSD(L&MR)/MPP&R.

A handwritten signature in blue ink, appearing to read "Diane K. Morales", is located below the text.

Diane K. Morales

# *DOD MAINTENANCE SYMPOSIUM & EXHIBITION*



## OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3000

May 31, 2002

### MEMORANDUM FOR GOVERNMENT/INDUSTRY MAINTENANCE MANAGERS

SUBJECT: 2002 DoD Maintenance Symposium and Exhibition

I am pleased to inform you that the annual Department of Defense (DoD) Maintenance Symposium and Exhibition is returning stronger than ever after being cancelled in 2001 in the wake of the September 11<sup>th</sup> terrorist attacks and our country's military response in Operation Enduring Freedom.

The 2002 DoD Maintenance Symposium and Exhibition will be held October 28-31, 2002 at the Reno Hilton in Reno, Nevada. The Symposium is sponsored by the Deputy Under Secretary of Defense for Logistics and Materiel Readiness in conjunction with the Society of Automotive Engineers (SAE) International. The theme of this year's program is "Maintenance: Turning Logistics Resources into Readiness."

I encourage you to attend the Symposium, which is the only DoD event that is focused exclusively on US military weapon systems and equipment maintenance. The Symposium agenda will address maintenance related issues which are at the center of a number of DoD initiatives to optimize the materiel readiness of weapon systems. This event brings together maintenance managers of all ranks and levels, representing the full range of maintenance operations within both Government and Industry. This is an outstanding opportunity to meet counterparts and exchange ideas for improvement of maintenance practices and procedures. Additionally, the Secretary of Defense Maintenance Awards Ceremony and banquet, which honors the best field level maintainers within DoD, will be held on Wednesday evening, October 30, 2002.

A copy of the Symposium brochure detailing the events of the week is attached. Continually updated information including hotel registration and Symposium registration fees can be found at [www.sae.org/dod](http://www.sae.org/dod). The DoD point of contact is Mr. Chuck Field, (703) 697-9067, [chuck.field@osd.mil](mailto:chuck.field@osd.mil). Please distribute copies to all organizations and individuals, as appropriate, and send us feedback if your mailing address needs correction.

Mark your calendar today – I look forward to seeing you in Reno in October 2002.

Robert T. Mason  
Assistant Deputy Under Secretary  
of Defense (Maintenance Policy,  
Programs and Resources)